

The Honorable Jeffrey B. Clark  
Assistant Attorney General  
United States Department of Justice  
Environment and Natural Resources Division  
4 Constitution Square  
150 M Street, NE  
Suite 2.900  
Washington, D.C. 20002

Re: Clean Air Act Multi-Regional Referral  
Williams Companies, Inc.

Dear Mr. Clark:

By this letter, the United States Environmental Protection Agency, Region 4, formally requests that the United States Department of Justice (DOJ) include a natural gas processing facility owned by Williams Mobile Bay Producers Services, LLC, a wholly owned subsidiary of Williams Companies, Inc. (Williams), located in Coden, Alabama, into a global settlement currently being negotiated with Williams on behalf of Regions 3, 5, 6, 7 and 8. The States of Alabama, Colorado, and Wyoming, the Commonwealth of West Virginia, and the Southern Ute Indian tribe in Colorado have joined this enforcement action.

In this letter referral, Region 4 alleges that the Williams facility in Coden, Alabama violated the Clean Air Act (CAA), 42 U.S.C. § 7411 (New Source Performance Standards) (NSPS) and the Leak Detection and Repair (LDAR) requirements of the implementing regulations at 40 C.F.R. Part 60, Subpart KKK (Standards of Performance for Equipment Leaks of Volatile Organic Compound (VOC) From Onshore Natural Gas Processing Plants for which Construction, Reconstruction or Modification Commenced after January 20, 1984, and on or before August 23, 2011); and 40 C.F.R. Part 60, Subpart OOOOa (Standard of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after September 18, 2015); Title V of the CAA, 42 U.S.C. § 7661a(a); and Ala. Admin. Code r 335-3-16-07.

On March 14, 2016, Region 3 made a direct referral requesting DOJ action for violations at the Williams facility located in Moundsville, West Virginia. The referral alleged violations of Section 111 of the CAA, 42 U.S.C. § 7411, NSPS, and its implementing regulations at 40 C.F.R. Part 60, Subpart OOOO

(Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015). The referral primarily alleged violations of LDAR requirements. Region 3 later amended the referral to include a second facility located in Moundsville, West Virginia.

On October 13, 2017, Region 8 made a direct referral requesting DOJ action for violations of the CAA, 42 U.S.C. § 7411, NSPS, and Section 112 of the CAA, 42 U.S.C. § 7412, at the Ignacio and Parachute Creek Gas Plants in Colorado, operated by Williams Four Corners LLC and Bargath LLC, wholly owned subsidiaries of Williams. The Region 8 referral primarily alleged violations of the LDAR requirements of the implementing regulations at 40 C.F.R. Part 60, Subparts KKK and OOOO.

## **I. Global Settlement Negotiations**

Representatives from DOJ, the Office of Enforcement and Compliance Assurance (OECA), Regions 3, 4, 5, 7 and 8 are currently engaged in settlement discussions with Williams. The first global settlement meeting was held o[ PAGE \\* MERGEFORMAT ]n October 23, 2018, in Denver, Colorado, at which time, the EPA and DOJ offered Williams an opportunity to engage in a global settlement and provided Williams with an outline of the terms of the proposed relief for settlement. In December 2018, Williams verbally agreed to pursue a global settlement approach. Williams followed up with a written response dated March 4, 2019, in which Williams proposed to include into the global settlement all fifteen gas processing facilities that are either one hundred percent owned by Williams or jointly or partially owned by Williams. On May 28, 2019, EPA and DOJ held a follow-up meeting with Williams to commence negotiating the terms of the injunctive relief. Williams signed a tolling agreement that tolls the running of the statute of limitations (SOL) for the Coden, Alabama facility from September 20, 2018, through August 1, 2019. Williams recently signed another tolling agreement that will toll the SOL until January 21, 2020.

## **II. Background on Williams Companies, Inc.**

Williams Mobile Bay Producers Services, LLC, the owner and operator of the gas processing facility in Coden, Alabama was incorporated in 2000, and is headquartered in Houston, Texas. It is a wholly owned subsidiary of Williams, an energy infrastructure company with operations primarily located in the United States. Williams was founded in 1908, and is currently incorporated in Delaware. In August 2018, Williams merged with Williams Partners, LP. Williams employs more than 5,000 people, and is headquartered in Tulsa, Oklahoma. Williams is a publicly held company that trades on the New York Stock Exchange. Williams owns and operates midstream gathering and processing facilities, and interstate natural gas pipelines. Substantially all of Williams' operations are conducted through its subsidiaries.

## **III. Williams' Region 4 Facility**

The Williams natural gas processing facility in Region 4 is located at 6000 Rock Road, Coden, Alabama, 36523 (Facility). The Facility operates two process trains with the capacity to produce about 690 million standard cubic feet per day of natural gas, approximately 30,000 barrels per day (bpd) of

natural gas liquids (NGLs) and also processes some amount of natural gasoline as a byproduct. The Facility receives gas from both onshore and offshore sources.

The Facility's natural gas processing begins with placing the raw gas through slug catchers to remove the liquid hydrocarbon (condensate) and water from the gas stream. The condensate is sent to the condensate stabilizer area, and the water is directed to a closed drain system. The gas stream exiting the slug catchers is sent to the dehydration unit and then the gas is cooled to condense out the NGLs liquids. The gas is recompressed and sent to the sales pipeline. The NGL are then sent to an amine treatment system to remove the carbon dioxide and sulfur compounds, and thereafter the NGLs are placed into the sales pipeline. The amine solution is sent to the amine regeneration tower where the impurities are removed from the amine solution, and then recycled in the amine contactor. Finally, the gases from the regeneration tower are sent to a thermal oxidizer, an air pollution control device that reduces emissions of VOCs and other hazardous air pollutants.

#### **IV. EPA Region 4 Investigation of the Williams Facility**

On April 17-19, 2018, representatives from the EPA Regions 3, 4 and 5 and the Alabama Department of Environmental Management (ADEM) conducted an on-site evaluation (Inspection) at the Williams Facility located in Coden, Alabama. At the time of the Inspection, Williams' LDAR contractor, Encos Environmental and Coastal Services was also present. During the Inspection, the EPA inspection team used an infrared camera, toxic vapor analyzers (TVA), and four-gas personal safety monitors to evaluate components in the various process units at the Facility. Monitoring was conducted in the condensate stabilization, inlet and gathering, and NGLs dehydration process units; and natural gas liquid extraction trains 1 and 2. At the time of the Inspection, the EPA inspectors obtained an electronic copy of the Facility's LDAR database for the time period from April 2011 through April 18, 2018. Based on the information collected during the Inspection, and a review of the Facility's LDAR electronic database and semi-annual reports, Region 4 identified violations of the regulations at 40 C.F.R. Part 60, Subparts KKK and OOOOa similar to some of those alleged in the referrals from Regions 3 and 8. The specific details about the alleged LDAR related violations are discussed below in Section V.

During the Inspection, the EPA held a conference call with representatives from the Facility, and Williams' headquarters to specifically discuss NSPS OOOOa applicability at the Facility. The applicability of NSPS OOOOa was triggered as a result of an ongoing expansion project (Project), described in more detail below, on page 11. The EPA also requested that Williams provide documentation related to the Project. In response to a follow-up email from EPA, on May 25, 2018, Williams provided the requested information.

#### **V. Violations**

The following section summarizes the legal and factual basis for alleged violations at the Williams Facility.

**A. Claim 1: Failure to Properly Conduct EPA Method 21 to Monitor Components in Violation of NSPS Subpart KKK (40 C.F.R §§ 60.630 through 60.636).**

Based on Region 4's review and evaluation of the Williams Facility electronic LDAR database, Region 4 determined that Williams failed to properly conduct EPA Method 21 testing procedures to monitor at least 1,641 components of equipment between October 13, 2014 and October 15, 2015.

***Applicability of NSPS Subpart KKK***

On June 24, 1985, the EPA promulgated "Standards of Performance for New Stationary Sources; Equipment Leaks of VOC From Onshore Natural Gas Processing Plants." 50 Fed. Reg. 26,122. Those standards are codified at 40 C.F.R. Part 60, Subpart KKK (40 C.F.R §§ 60.630 through 60.636), and apply to natural gas plants for which construction, reconstruction, or modification commenced after January 20, 1984,<sup>1</sup> and on or before August 23, 2011. Those standards by reference, require compliance with several regulations in 40 C.F.R. Part 60, Subpart VV.<sup>2</sup> (40 C.F.R. §§ 60.480 through 60.489).

The Facility's amended title V operating effective October 5, 2017 through January 2, 2019, states that Facility is subject to the requirements of 40 C.F.R. Part 60, Subpart KKK, and identifies the following process units: Inlet Gather and Separation; Condensate Stabilization; Gas Dehydration; NGL Extraction; and NGL Treatment process units and the Closed Vent and Fuel Auxiliary Utility systems for which construction, reconstruction, or modification commenced after January 20, 1984 and on or before August 23, 2011.

***Relevant Legal Requirements***

Subpart KKK, at 40 C.F.R. § 60.632(a) requires compliance with specified provisions in Subpart VV. Specifically, Subpart VV at 40 C.F.R. § 60.485 requires owners and operators to comply with the test methods and procedures (40 C.F.R. § 60.632(d)). Pursuant to 40 C.F.R. § 60.485(d), an [ HYPERLINK ] must test each piece of [ HYPERLINK ] for VOC leaks unless it is demonstrated that a [ HYPERLINK ] is not [ HYPERLINK ], [ HYPERLINK ], the [ HYPERLINK ] would never be reasonably expected to exceed 10 percent by weight.

Pursuant to 40 C.F.R. § 60.485(b), the owner or operator is required to use the EPA Method 21 testing procedures to determine the presence of VOC leaks from components in process units, including, but not limited to, valves, flanges, pumps, compressors, and pressure relief devices, in accordance with the requirements in § 60.484(a) (Appendix A-7).

40 C.F.R. Part 60, Appendix A-7 (Section 8.3.1- EPA Method 21) (Determination of Volatile Organic Compound Leaks) specifically requires the LDAR technician to take the following steps to properly and accurately monitor components:

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<sup>1</sup> These standards were proposed on January 20, 1984, and became effective upon date of final promulgation on June 24, 1985.

<sup>2</sup> Subpart VV is called Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemical Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after January 5, 1981, and on or before November 7, 2006.

- a) Place the probe inlet at the surface of the component interface where leakage could occur;
- b) Move the probe along the interface periphery, while observing the instrument readout. If an increased meter reading is observed, slowly sample the interface where leakage is indicated until the maximum meter reading is obtained; and
- c) Leave the probe inlet at this maximum reading location for approximately two times the instrument “response time” which is defined in Appendix A-7, as “the time interval from a step change in VOC concentration at the input of the sampling system to the time at which 90 percent of the corresponding final value is reached as displayed on the instrument readout meter.”

### ***Facts Supporting Violations***

According to Thermo Fisher Scientific, the manufacturer of the probe instrument identified as TVA-1000B (TVA) used by the Facility to conduct the Method 21 monitoring, the response time for the probe is approximately 3.5 seconds. This response time is consistent with the information provided in EPA’s “Leak Detection and Repair: A Best Practices Guide” (LDAR Guidance),<sup>3</sup> which indicates that the typical response times are around 2-4 seconds. As stated above, Section 8.3.1 of EPA Method 21, requires the technician to leave the probe inlet at the maximum reading location for approximately two times the instrument response time. This means, on average, it should take Williams’ technician at least seven (7) seconds to monitor each component, if an increased meter reading is observed by the technician. However, the seven seconds timeframe does not include the additional time that is needed to locate and identify the component and to move the probe around the component to determine the maximum reading location. According to the LDAR Guidance, this extra time is critical because “if an LDAR technician moves the probe around the component interface so rapidly that the instrument does not have time to properly respond, then there is the risk that a component may never be identified as leaking.”

Thus, a minimum amount of time is necessary for a technician to adequately perform EPA Method 21 monitoring. While it may be difficult to identify a specific minimum threshold due to facility-specific factors such as the size and design of a process unit, it is a given that it will take some additional amount of time for the technician to locate the component to be monitored, and to locate the component interface where the leakage could occur. Then, the technician must take additional time to move the TVA instrument probe along the component interface periphery while observing the instrument readout. If the technician moves the TVA instrument probe too quickly, then a potential leaking component may be missed. Furthermore, if an increased meter reading is observed, the technician must take the necessary time to slowly sample the interface where that leakage is indicated by the increased meter reading, in order to identify the location where the maximum meter reading is obtained. Once that maximum meter reading location is identified, the technician must leave the probe inlet at this location for at least seven seconds

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<sup>3</sup> Published by Office of Enforcement and Compliance Assurance (OECA) in October 2007.

In discussions with the EPA LDAR experts, Region 4 has determined that as a general rule of thumb, for a typical 8-hour LDAR monitoring event no more than approximately 400 components could be properly monitored using EPA Method 21, which is about one component every 72 seconds. During the Inspection of the Williams facility, a team of three EPA inspectors conducted Method 21 monitoring simultaneously. Over the three-day Inspection, the EPA inspectors monitored a total of 604 valves in approximately 8 hours and 5 minutes, which is about one component per every 48.2 seconds.<sup>4</sup> Because LDAR monitoring was conducted by a team of inspectors, it resulted in a much quicker monitoring rate than what is normally expected when the monitoring is performed by a single LDAR technician. For example, the average monitoring component rate per inspector during the April 2018 inspection was approximately 2 minutes and 25 seconds per component. In contrast, evidence from Williams LDAR database discussed below indicates that Williams monitored hundreds of components in less than an hour, spending as little as an average of 3.6 seconds per component and up to 6.4 seconds per component. This is not enough time for proper Method 21 monitoring.

Based on a detailed review and evaluation of the data monitoring records in the Facility's electronic LDAR database, the EPA determined that Williams failed to properly conduct EPA Method 21 test procedures to monitor at least 1,641 components from October 2014 through October 2015, as demonstrated below, in violation of 40 C.F.R. §§ 60.632(d), 60.483-2 and 60.485(b):

- a) On October 14, 2015, approximately 328 components were monitored from 2:18 pm to 2:49 pm (31 minutes) by a technician using the TVA instrument. This indicates that the technician monitored an average of over 10 components per minute or one component every 5.7 seconds.
- b) On October 13, 2015, approximately 510 components were monitored from 1:45 pm to 2:39 pm (54 minutes) by a technician using the TVA instrument. This indicates that the technician monitored an average of over nine components per minute or one component every 6.4 seconds.
- c) On April 21, 2015, approximately 399 components were monitored from 7:26 am to 8:06 am (40 minutes) by a technician using the TVA. This indicates that the technician monitored an average of over nine components per minute or one component every 6 seconds.
- d) On April 20, 2015, approximately 518 components were monitored from 3:16 pm to 3:47 pm (31 minutes) by a technician using the TVA instrument. This indicates that the technician monitored an average of over sixteen components per minute or one component every 3.6 seconds.
- e) On October 7, 2014, approximately 285 components were monitored from 3:29 pm to 3:58 pm (29 minutes) by a technician using the TVA instrument. This indicates that the technician monitored an average of over nine components per minute or one component every 6.1 seconds.
- f) On October 7, 2014, approximately 170 components were monitored from 7:56 am to 8:14 am (18 minutes) by a technician using the TVA instrument. This indicates that the technician monitored an average of over nine components per minute or one component every 6.4 seconds.

The above-referenced monitoring events demonstrate that it took the Williams Facility between 3.6 to 6.4 seconds to monitor each component, which is less than twice the response time (seven seconds) recommended by the manufacturer of the TVA and the EPA LDAR Guidance. The seven seconds does

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<sup>4</sup> This is consistent with the LDAR Guidance which states that "a well trained LDAR team of two people can monitor approximately 500-700 valves per day."

not take into account the additional time that is needed to allow the technician to first locate and identify the component to be monitored and to properly move the probe around the component to identify the maximum reading location, in accordance with the requirements in 40 C.F.R. Part 60, Appendix A-7 (Section 8.3.1 of EPA Method 21). Each of the monitoring events discussed above was conducted at a rate that is approximately an order of magnitude faster than what is expected based on EPA's experience and expertise. Williams failed to properly conduct the EPA Method 21 testing procedures to monitor at least 1,641 components, in violation of 40 C.F.R. §§ 60.632(d), 60.483-2, and 60.485(b).

**B. Claim 2: Failure to Conduct LDAR Inspections on Valves, Pumps, Closed Vent Systems, Compressor, and Pressure Relief Devices in Violation of NSPS Subpart KKK (40 C.F.R. § 60.633(b)) and NSPS Subpart VV Regulations Required by Subpart KKK (40 C.F.R. §§ 60.482-2; 60.482-3; 60.482-7; and 60.482-10).**

Based on a review and evaluation of the Williams Facility electronic LDAR database, the EPA determined that between September 20, 2013 and December 31, 2018, the Facility failed to conduct inspections on at least 693 components including valves, pumps, closed vent systems, compressor (one), and pressure relief devices.

***Relevant Legal Requirements***

Each type of component is required to be monitored periodically in accordance with the following applicable regulations:

*Valves are the most common piece of process equipment and are used to either restrict or allow the movement of fluids. Leaks from valves are commonly caused by failure of the valve packing.*

- Each valve in gas and vapor service and in light liquid service is required to be monitored monthly to detect leaks by the methods specified in § 60.485(b), pursuant to 40 C.F.R. § 60.482-7(a)(1), except that an [ HYPERLINK ] may elect to comply with one of the alternative work practices provided in § 60.483-2 (Alternative Standards for valves - Skip Period Leak Detection and Repair). Williams has elected to implement the skip period leak detection and repair alternative, which requires the valves to be monitored semi-annually in lieu of monthly.<sup>5</sup>

*Pumps are used to move fluids from one point to another and leaks typically occur at the seal.*

- Each pump in light liquid service is required to be monitored monthly to detect leaks by the methods specified in § 60.485(b), pursuant to 40 C.F.R. § 60.482-2(a)(1).

*Closed Vent Systems are composed of piping, connections and often flow inducing devices that transport gas or vapor from pieces of equipment to a control device. Leaks can occur at the piping connectors.*

- Each closed vent system is required to be monitored annually for visible, audible, or olfactory indications of leaks pursuant to 40 C.F.R. § 60.482-10(f)(1)(ii).

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<sup>5</sup> In letters dated March 21, 2005, and December 9, 2011, Williams notified the EPA about its decision to elect to implement the Skip Period option.

*Compressors are designed to increase the pressure of a fluid and provide motive force. Leaks most often occur from the seals.*

- Each compressor designated for no detectable emissions shall be tested for compliance initially and then annually pursuant to 40 C.F.R. § 60.482-3(i)(2).

*Pressure Relief Devices are safety devices designed to protect equipment from exceeding the maximum allowable working pressure. Leaks can occur if the valve is not sealed properly, operating too close to set point, or if the seal is worn or damaged.*

- Each pressure relief device in gas/vapor service is required to be monitored quarterly and within 5 days after each pressure release to detect leaks (using methods specified in § 60.485(b) pursuant to 40 C.F.R. § 60.633(b)(3).

### ***Facts Supporting Violations***

Region 4 reviewed and evaluated the information provided in the Facility's LDAR database and identified numerous instances of Williams' failure to conduct LDAR inspections for at least 694 components (valves, pumps, closed vent systems, one compressor and pressure relief devices) between September 20, 2013 and December 31, 2018, as summarized in the Table below:

| <b>Dates of Missed Inspections</b> | <b>Total Number of Components</b> | <b>Number of Valves (violation of § 60.482-7(a)(1))</b> | <b>Number of Pumps (violation of § 60.482-2)</b> | <b>Number of Closed Vent Systems (violation of § 60.482-10)</b> | <b>Number of Compressors (in violation of § 60.482-3(i)(2))</b> | <b>Number of Pressure Relief Device (violation of § 60.633(b))</b> |
|------------------------------------|-----------------------------------|---|--|---|---|--|
| 2013                               | 113                               | 109   | 4  | 0   |   |  |
| 2014                               | 487                               | 469   | 8  | 7   | 1   | 2  |
| 2015                               | 35                                | 11  | 9  | 15  |   |  |
| 2016                               | 38                                | 25  | 0  | 13  |   |  |
| 2017                               | 12                                | 10  | 2  | 0   |   |  |
| 2018                               | 8                                 | 6   | 2  | 0   |   |  |

Further, during the Inspection, the Facility's operation supervisor represented to the EPA that it was their practice to physically tag each regulated component with a unique identification number. However, at the time of the Inspection, during the walk through of the Inlet Gathering and Separation and the NGL process units, the EPA inspectors observed that a number of the regulated components were not tagged. Since Williams represented to the EPA that the Facility utilized tagging to identify regulated components, it is highly likely that the Facility's LDAR contractor was not monitoring all the equipment components in the Facility's LDAR program. As a result, leaking components were likely overlooked and not repaired by the Facility, as required by Subparts KKK and VV. As noted in the LDAR



Guidance, “if a facility does not properly identify all of its regulated components, some leaks may go unidentified.” Under such circumstances, “unidentified components may leak or have existing leaks that will worsen over time if the components are not properly identified, monitored and repaired.”

In July 2018, a few months after the EPA inspection, Williams hired a new LDAR contractor, Target Emissions Services (Target), at which time the Facility implemented a new LDAR program. According to the semi-annual report for the time period from July 1, 2018 through December 31, 2018, Target re-tagged and re-documented the Facility’s entire LDAR components because the previous component count was determined to be inaccurate and unreliable. Based on the EPA’s review of the recent semi-annual report prepared by Target, it was determined that twice as many LDAR components including valves, pressure relief devices, pumps and compressors were monitored as compared with the number of components that were previously monitored by the Facility’s former LDAR contractor. While some components may have been added as a result of the ongoing expansion Project, the EPA believes it is likely that the disparity in the number of monitored components was at least partially attributed to the Facility’s poorly operated LDAR program.

Region 4 is not referring a violation based on tagging because there is no regulatory requirement to tag. Instead, as explained above, the regulations require monitoring of all LDAR-covered components. Region 4 suspects that Williams was not doing this and if global settlement discussions fail, Region 4 may investigate further. Based on this concern, Region 4 requests that any injunctive relief obtained ensure that Williams undertake appropriate efforts to clearly identify all LDAR-covered components.

In addition, if the Facility failed to include all the valves in the LDAR program, then it is likely that there were leaking valves that were not included in the percent of valves leaking calculation. The calculation is important because under 40 C.F.R. § 60.483-2, as discussed on page 7, Williams had elected to comply with a skip LDAR program because the Facility represented that the percent of leaking valves was less than 2.0 percent. While Region 4 is not referring violations based on the failure to calculate accurate leak rates, it is useful to include this information in the referral because if global settlements fail, Region 4 may decide to investigate further and develop this potential violation. It will also be information that can be considered in developing the terms of the injunctive relief.

Based on the information provided in the Table above, and observations made during the Inspection, the EPA determined that between September 20, 2013 and December 31, 2018, the Williams Facility failed to conduct inspections on at least 693 components including valves, pumps, closed vent systems, compressor (one), and pressure relief devices, in violation of 40 C.F.R. §§ 60.482-7; 60.482-2; 60.482-10; 60.482-3 and 60.633(b).

**C. Claim 3: Failure to Make First Attempts at Repair, and Final Repair on Leaking Valves; and Document Delay of Repair Information in the Semi-Annual Report in Violation of NSPS Subpart KKK (40 C.F.R. §§ 60.487(c)(vii); 60.482-7(d)(1) and (d)(2)).**

Based on a review and evaluation of the Williams Facility’s electronic LDAR database, and semi-annual reports, the EPA determined that Williams failed to make first attempts at repair within the requisite five (5) days, and final repair within 15 days for the two components discussed below. Williams also failed to include and document requisite delay of repair information in the Facility’s semi-annual report.

## ***Relevant Legal Requirements***

### ***First Attempts at Repair and Final Repair***

Pursuant to 40 C.F.R. § 60.482-7(1), each valve in gas vapor service and in light liquid service shall be monitored monthly to detect leaks using EPA Method 21 testing procedures as specified in [ HYPERLINK "https://www.law.cornell.edu/cfr/text/40/60.485" \l "b" ].

Pursuant to § 60.482-7(b), a leak is detected if an instrument reading of 10,000 parts per million (ppm) or greater is measured. The monitoring frequency can be reduced from monthly to quarterly if a leak is not detected in two successive months.

Pursuant to 40 C.F.R. § 60.482-7a(d)(2), a [ HYPERLINK ] shall be made no later than five (5) calendar days after each leak is detected. First attempts at repair include, but are not limited to, the following best practices where practicable and appropriate:<sup>6</sup>

- (1) Tightening of bonnet bolts;
- (2) Replacement of bonnet bolts;
- (3) Injection of lubricant into lubricated packing; and
- (4) Tightening of packing gland nuts.

When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after the leak is detected in accordance with 40 C.F.R. § 60.482-7(d)(1).

### ***Delay of Repair***

Pursuant to 40 C.F.R. § 60.482-9(a), a delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after start-up of the process unit.

Pursuant to 40 C.F.R. § 60.487(a), each [ HYPERLINK ] subject to the provisions of this subpart is required to submit semiannual reports to the [ HYPERLINK ] beginning six months after the initial [ HYPERLINK ] date. All semi-annual reports submitted to the Administrator are required to include the facts that explain each delay of repair and why a repair was technically infeasible without a process unit shutdown, in accordance with 40 C.F.R. § 60.487(c)(vii).

## ***Facts Supporting Violations***

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<sup>6</sup> “Inspection Manual: Federal Equipment Leak Regulations for the Chemical Manufacturing Industry,” Volume I dated December 1998, published by OECA.

Based on a review and evaluation of the Williams Facility's electronic LDAR database, the EPA determined that Williams failed to make first attempts at repair within the requisite five (5) days and final repair within 15 days for the following valves, and also failed to include and document requisite delay of repair information in the semi-annual report, in violation of 40 C.F.R. §§ 60.487(c)(vii); 60.482-7(d)(1); and 60.482-7(d)(2):

- a) According to the LDAR electronic database, a valve identified as component number 1799 was inspected on April 14, 2014, and the monitoring results showed a reading of 14,819 ppm, above the leak detection standard of 10,000 ppm. The "repair" table in the LDAR database documented that the Facility performed first attempt at repair by tightening the packing on April 17, 2014, and at that time, the monitoring results showed a reading of 10,000 ppm. The component was later re-monitored on May 19, 2014, and the results showed a reading of 33,132 ppm, which was well in excess of the LDAR leak detection standard. According to the documentation in the "repair" table, the valve was replaced on June 19, 2014, and re-monitored on July 29, 2014, at which time the reading was 0 ppm. Williams had no documentation to support that the valve was placed on delay of repair status, in accordance with 40 C.F.R. § 60.482-9(a). Williams was required to make the first attempt at repair within five (5) days after the May 19, 2014 inspection but failed to do so until one month later, in violation of 40 C.F.R. § 60.482-7(d)(2).
- b) In addition, the documentation in the Facility's LDAR electronic database demonstrates that the Facility did not make the final repair on the valve (component 1799) discussed above, until June 19, 2014, sixty-six (66) days after the date the leak was detected on April 14, 2014, and 51 days after the date it was required to make the final repair. Williams' failed to make a final repair on the valve within 15 days, in violation of 40 C.F.R. § 60.482-7(d)(2).
- c) According to the Facility's electronic LDAR database, a valve identified as component number 19602 located in the NGL process unit was inspected on April 4, 2017, as documented in the "inspection" table, and the monitoring results showed a reading of 88,225 ppm, significantly in excess of the leak detection standard of 10,000 ppm. The "repair" table indicated that the Facility made the first attempt at repair on April 4, 2017, when packing was tightened, and the monitoring results showed a reading of 47,397 ppm (still significantly in excess of the leak detection standard). The "Inspection" table documented that the repair on the component was completed on July 24, 2017, and the results showed a reading of 22 ppm. The documentation in the Facility's LDAR electronic database demonstrates that the Facility did not make the final repair on the valve until 111 days after the leak was detected on April 4, 2017, and 96 days after the date it was required to make the final repair. Williams failed to make a final repair on the valve no later than 15 days after the leak was detected, in violation of 40 C.F.R. § 60.482-7(c)(2)(vii).
- d) The "delay of repair" table in the electronic LDAR database indicated that the valve (component 19602) discussed above, was added to the delay of repair list on April 18, 2017. However, the Facility's periodic report dated July 21, 2017, covering the period from January 1, 2017 to June 30, 2017, did not include any information concerning the delay of repair for that valve, including facts that explained the reason for the delay of repair and why a repair without a process unit

shutdown was technically infeasible. William failed to provide requisite information in the semi-annual report explaining the reason for the delay of repair for the valve, in a violation of 40 C.F.R. § 60.487(c)(vii).

**D. Claim 4: Failure to Provide Notice of Start-up of Construction, Modification or Reconstruction in Violation of NSPS Subpart OOOOa (40 C.F.R. §§ 60.5420a and 60.7(a)(3)).**

Based on Region 4's Inspection and review of Williams' letter titled "Notification of Construction, Modification and Initial Start-up" (Notification Letter) dated May 23, 2018, an air permit application dated December 15, 2016 and the air permit (503-8056-X009) dated September 17, 2017, it was determined that Williams commenced initial start-up of the NGL extraction process unit on December 4, 2017. Williams failed to provide notice of the initial start-up date within 15 days after that date.

***Applicability of NSPS OOOOa***

On June 3, 2016, the EPA promulgated "New Source Performance Standards" for the Oil and Natural Gas Sector, 81 Fed. Reg. 35,898. These standards are codified at 40 C.F.R. Part 60, Subpart OOOOa, and among other things, apply to an "affected facility" that is the "group of all equipment within a process unit" at natural gas processing plants that commenced construction, modification, or reconstruction after September 18, 2015. NSPS OOOOa includes LDAR requirements for natural gas processing plants at 40 C.F.R. § 60.5365a.

According to the Notification Letter, Williams acknowledged that the Facility became subject to NSPS Subpart OOOOa on December 4, 2017, at which time they initiated start-up on a portion of the "Norphlet Expansion Project" (mentioned above on page 3) involving modifications to train 2 of the NGL extraction process unit (affected facility). The Project meets the definition of the term "modification" in 40 C.F.R. § 60.14, which states "any physical or operational change to an [ [HYPERLINK](#) ] which results in an increase in the emission rate to the atmosphere of any pollutant to which a [ [HYPERLINK](#) ] applies shall be considered a [ [HYPERLINK](#) ] within the meaning of Section 111 of the CAA."

As discussed further below, Williams also submitted a permit application to ADEM on December 15, 2016, for the installation of a number of equipment and process unit piping components related to the ongoing Project. Williams' permit application identified NSPS OOOOa as applicable to the new process piping components. On March 7, 2017, ADEM issued two permits: Numbers 503-8056-X010 and 503-8056-X011. Condition I of Permit 503-8056-X011, under the section "Emission Standard for Equipment in VOC Service" also identified NSPS OOOOa as applicable.

***Relevant Legal Requirements***

In accordance with 40 C.F.R. §§ 60.5420a(a)(1) and 60.7(a)(3), an owner and operator of an affected facility, defined here as the group of all equipment within a process unit at an onshore natural gas processing plant, is required to submit a notification of the actual date of the initial [ [HYPERLINK](#) ] of an [ [HYPERLINK](#) ] postmarked within 15 days after such date.

Pursuant to 40 C.F.R. § 60.2, the term "start-up" is defined as "setting in operation of an affected facility for any purpose."

### *Facts Supporting the Violations*

On December 15, 2016, Williams submitted a permit application to ADEM to amend the Facility's air quality permit (503-8056-X009) that was issued on September 17, 2017, for modification that the Facility was planning to undertake as part of the planned Project. The first phase involved the installation of new equipment to handle an increase in hydrocarbon liquid volumes including one slug catcher, two condensate stabilizers, three compressors, two hot oil heaters, four stabilized condensate tanks, two truck loading racks, a flare to control emissions from the loading racks, and additional piping and components associated with the equipment. The application also provided estimates of Facility-wide emissions increases including VOC emissions that would result from the modification. The permit application identified NSPS OOOOa as applicable to the new process piping components at the Facility. As referenced above, the air permit (number 503-8056-X011) issued in response to this application also indicated that the affected facilities were subject to the requirements of NSPS OOOOa.

Subsequently, at the time of the Inspection, EPA was informed about the Project involving the modification and requested additional information. In an email dated May 4, 2018, the EPA submitted questions to Williams about the Project. In response, on May 25, 2018, Williams followed up in an email to the EPA and attached the Notification Letter which informed ADEM that Williams had commenced modification at the Facility's NGL extraction process unit on December 4, 2017. Williams indicated that the modification involved a multiple phase expansion project to accommodate more natural gas condensate liquids from a new inlet stream. The Project is expected to be completed in 2020 and will increase the natural gas condensate liquids capacity from 3,200 bpd to 26,000 bpd. The Project will involve the installation of new or replacement equipment, as mentioned above.

Based on the information provided in the Notification Letter, Williams first initiated start-up of the NGL extraction process unit (an affected facility) on December 4, 2017, when the Cryogenic Train 2 equipment components within the process unit were pressurized. The Cryogenic Train 1 was subsequently pressurized on March 28, 2018, as additional equipment components were added to the NGL extraction unit. Williams was required to submit a notification of the actual date of initial [ HYPERLINK ] of the modification undertaken at the NGL extraction process unit postmarked within 15 days after December 4, 2017, but did not do so until over five months after the start-up date. This delay is a violation of 40 C.F.R. §§ 60.7(a)(3) and 60.5420a(a).

**E. Claim 5: Failure to Meet the Requirements of the Title V Operating Permit in Violation of 42 U.S.C. § 7661a(a); 40 C.F.R. § 71.12 and Ala. Admin Code R. 335-3-16-.07.**

Title V of the CAA, 42 U.S.C. §§ 7661a-7661f, established a federally mandated operating permit program to be implemented by the states. Pursuant to § 504(a), title V permits must include all applicable emission limitations and standards of the Act for each major source. Title V of the CAA, 42 U.S.C. § 7661a(a), makes it "unlawful for any person to violate any requirement of a permit issued under [the title V permit program]." Sections 501 through 507 of the CAA, 42 U.S.C. §§ 7661a through 7661f, require state and local authorities to develop a title V program and submit it to the EPA for approval. Alabama's EPA-approved title V program became effective on December 28, 1993 (61 Fed.

Reg. 18966). Alabama's title V regulations are currently codified at Ala. Admin. Code 335-3-16. Even though the EPA has approved Alabama's title V program, the EPA retains its authority to take any enforcement action against a source for title V violations. 42 U.S.C. § 7413(c); 40 C.F.R. § 70.6(b) and 40 C.F.R. § 70.10(b)(5).

The Williams Facility's current title V permit is dated January 3, 2019, expires on October 4, 2022, and is the Facility's fourth title V renewal. The previous title V permit was issued on October 5, 2017, expired on January 2, 2019, and included federally-enforceable provisions requiring compliance with 40 C.F.R. Part 60, Subpart KKK. Thus, each violation of NSPS KKK (alleged in Section V above[ PAGE \\* MERGEFORMAT ]e) also constitutes a violation of the title V permit condition imposing that requirement. 42 U.S.C. § 7661a(a) and Ala. Admin. Code r 335-3-16-07.

The October 5, 2017 title V permit in effect at the time of the EPA Inspection did not require compliance with Subpart OOOOa and Region 4 is not asserting title V violations associated with Subpart OOOOa. The current title V permit requires compliance with Subpart OOOOa. Region 4 does not have evidence of Subpart OOOOa violations occurring after the date of issuance of the current title V permit.

## **VI. State Involvement and Cooperative Federalism**

Region 4 technical staff and management coordinated with ADEM and invited them to participate in the Williams Inspection. An ADEM representative participated and was present on the first day of the Inspection on April 17, 2018. Region 4 management contacted ADEM on or about April 25, 2019, to discuss the general status of the potential enforcement action and extended an invitation to the State to join the enforcement action. On May 17, 2019, ADEM responded to the Region and confirmed that they plan to participate in the settlement negotiations. On June 10, 2019, DOJ forwarded a joint prosecutorial agreement (Agreement) to ADEM for review and on June 20, 2019, the State of Alabama and ADEM signed the agreement. All participating states are required to enter into this agreement with DOJ to help ensure that settlement discussions are maintained confidential. The expected collaborative partnership between EPA and ADEM is consistent with the memorandum entitled "Enhancing Effective Partnership Between the EPA and the States in Civil Enforcement Compliance Assurance Work" from Susan Bodine (Assistant Administrator) dated July 11, 2019. Since there appears to be widespread LDAR noncompliance issues at Williams' facilities nationwide, and because some of the evidence used in this case was obtained using specialized equipment that is not utilized by ADEM, Region 4 believes it is appropriate for the EPA to maintain the lead in this enforcement action. Further, EPA Headquarters commenced this Initiative (Ensuring Energy Extraction Activities Comply with Environmental Laws) a few years ago, and a Federal lead would ensure consistency and a level playing field within energy extraction industry.

## **VII. Environmental Justice (EJ)**

Region 4 has conducted a demographic analysis using EJScreen, a tool which generates data to provide an overview of places where EJ may warrant greater consideration. The result of the EJScreen analysis indicates that the Williams Facility in Coden, Alabama is not located in an environmental justice area. The EJSCREEN analysis indicates that the Facility has no EJ Indexes over the 80<sup>th</sup> percentile nationally

within the one-mile buffer area. Based on the enforcement team's coordination with Region 4's EJ office, no community has self-identified as an environmental justice area; the Facility is not located in a tribal area, and there are no tips or complaints concerning the Facility.

#### **VIII. Contact Information**

The EPA Region 4 staff members assigned to this matter are: Marlene Tucker, Associate Regional Counsel of the Air & EPCRA Law Office, at (404) 562-9536 and Denis Kler of the Air Enforcement Section 1 at (404) 562-9199.

Sincerely,

Mary S. Walker  
Regional Administrator

cc: Leif Palmer  
Regional Counsel